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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,127	01/24/2005	Toshiyuki Wada	2005_0081A	1946

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EXAMINER

LIANG, LEONARD S

ART UNIT	PAPER NUMBER
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2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/522,127

Applicant(s)

WADA ET AL.

Examiner

Leonard S. Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-2, 4-14, and 17-26, drawn to an image recording apparatus/method, classified in class 347, subclass 20.
- II. Claims 3 and 15, drawn to an image forming medium and an image receiving layer transferer, classified in class 347, subclass 105.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because an image recording apparatus/method can use any image forming medium, regardless of whether the medium comprises a laminate wherein an aqueous solvent permeating layer and an image receiving layer are laminated on a substrate for the image forming medium in the above listed order from the substrate. The subcombination has separate utility such as being used in a non-ink-jet image recording apparatus, or being used in a sheet-feed apparatus that does not involve image recording.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104.

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See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Within Group I is the following species requirement:

This application contains claims directed to the following patentably distinct species:

- Species 1 is directed to an image recording apparatus comprising an image forming medium, an image recording section, and an image transfer section, wherein the image forming medium comprises a laminate of an aqueous solvent permeating layer and the image receiving layer which are laminated on and in the above listed order from a substrate for the image forming medium
- Species 2 is directed to an image recording apparatus comprising an image forming medium, an image recording section, and an image transfer section, wherein the image recording section comprises an image drying mechanism which accelerates drying of an image recorded on the image receiving layer of the image forming medium
- Species 3 directed to an image recording apparatus comprising an image forming medium, an image recording section, an image drying section, an image

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incorporating section having an image receiver and an image incorporating heat medium for integrating the image forming medium with the image receiver which faces the image forming medium in its back side

- Species 4 directed to an image recording apparatus comprising an intermediate support, an image receiving layer transfer section having an image receiving layer transferer which includes an image receiving layer and an image receiving layer transfer head which faces a part of the intermediate support on an outer periphery of one platen of said at least one platen, an image recording section, an image transfer section having an image receiver and an image transfer heat medium which faces the intermediate support inside the closed loop, wherein the intermediate support comprises a substrate and a coating film, and the coating film is formed by applying a coating composition for forming the coating film on at least one main surface of the substrate by using a spraying method
- Species 5 directed to an image recording apparatus comprising an intermediate support which forms a closed loop and extends over at least one platen, an image receiving layer transfer section having an image receiving layer transferer which includes an image receiving layer and an image receiving layer transfer head which faces a part of the intermediate support on an outer periphery of one platen of said at least one platen, an image recording section, and an image transfer section, wherein the intermediate support comprises a substrate and a coating film, and the coating film is formed by applying a coating composition for forming the coating film on at least one main surface of the substrate and then

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baking it at a temperature of not lower than 140 °C for a time of not shorter than 10 minutes

- Species 6 directed to an image recording apparatus comprising an intermediate support which forms a closed loop and extends over at least one platen, an image receiving layer transfer section having an image receiving layer transferer and an image receiving layer transfer head, an image recording section, and an image transfer section having an image receiver and an image transfer heat medium which faces the intermediate support inside the closed loop, wherein the platen on which the image receiving layer transfer section is positioned comprises a heat medium for heating the platen
- Species 7 directed to an image recording apparatus, an intermediate support, an image receiving layer transfer section, an image recording section, an image transfer section, wherein the image receiving layer transferer including the image receiving layer comprises a laminate of the image receiving layer and an aqueous solvent permeating layer which are laminated on and in the above listed order from a substrate for the image receiving layer transferer
- Species 8 directed to an image recording apparatus comprising an intermediate support which forms a closed loop and extends over at least one platen, an image receiving layer transfer section, an image recording section having at least one ink-jet head which faces a part of the intermediate support on an outer periphery of one platen which is the same as or different from said one platen, and an image transfer section, wherein the image recording section comprises an image drying

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mechanism which accelerates drying of an image recorded on the image receiving layer

- Species 9 directed to an image recording method using an image forming medium, an ink-jet head, an image receiver, and an image transfer heat medium, wherein the image recording method comprises: an image recording step in which the image is recorded on the image receiving layer of the laminate on the image forming medium by using the ink-jet head in an image recording section, and an image transfer step in which the image forming medium is heated from its back surface by using the image transfer heat medium and then the laminate in which the image is recorded is transferred to the image receiver in an image transfer section
- Species 10 directed to an image recording method using an image forming medium, an ink-jet head, an image receiver, and an image transfer heat medium, wherein the image recording method comprises an image recording step in which the image is recorded on the image receiving layer of the image forming medium by using the ink-jet head and an image drying step in which drying of the recorded image on the image receiving layer is accelerated in an image recording section, and an image transfer step in which the image forming medium is heated from its back surface by using the image transfer heat medium and then the image receiving layer having the image recorded thereon is transferred to the image receiver in an image transfer section

- Species 11 directed to an image recording method using an image forming medium, an ink-jet head, an image receiver, and an image incorporating heat medium for integrating the image receiver with the image forming medium in which an image is recorded on the image receiving layer, wherein the image recording method comprises an image recording step in which the image is recorded on the image receiving layer of the image forming medium using the ink-jet head and an image drying step in which drying of the recorded image of the image receiving layer is accelerated in an image recording section, and an image incorporating step in which the image forming medium is heated from its back surface by using the image incorporating heat medium, so that the image forming medium comprising the image receiving layer on which the image is recorded is integrated with the image receiver in an image incorporating section
- Species 12 directed to an image recording method using an intermediate support which forms a closed loop while it extends over at least one platen, an image receiving layer transferer including an image receiving layer, an image receiving layer transfer head for thermally transferring the image receiving layer to the intermediate support, at least one ink-jet head or toner-jet head for recording an image on the image receiving layer, an image receiver, and an image transfer heat medium for transferring the image receiving layer on which the image is recorded from the intermediate support to the image receiver, wherein the image recording method comprises an image receiving layer transfer step, an image recording step, and an image transfer step in which the intermediate support is

heated from its back surface by using the image transfer heat medium, so that the image receiving layer on which the image is recorded is transferred to the image receiver in an image transfer section, and the intermediate support comprises a substrate and a coating film, and the coating film is formed by applying a coating composition for forming the coating film on at least one main surface of the substrate by using a spraying method

- Species 13 directed to an image recording method using an intermediate support, an image receiving layer transferer, an image receiving layer transfer head, at least one ink-jet head or toner-jet head, an image receiver, and an image transfer heat medium, wherein the image recording method comprises an image receiving layer transfer step, an image recording step in which the image is recorded on the image receiving layer of the intermediate support by using the ink-jet head or toner-jet head, and the image receiving layer transfer head and said at least one ink-jet head or toner-jet head face a part of the intermediate support on an outer periphery of a platen which is the same as or different from the platen which they face in an image recording section, an image transfer step, and the intermediate support comprises a substrate and a coating film, and the coating film is formed by applying a coating composition for forming the coating film on at least one main surface of the substrate and then baking it at a temperature of not lower than 140 °C for a time of not shorter than 10 minutes
- Species 14 directed to an image recording method using an intermediate support, an image receiving layer transferer, an image receiving layer transfer head, at

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least one ink-jet head, an image receiver, and an image transfer heat medium, wherein the image recording method comprises an image receiving layer transfer step, an image recording step, an image transfer step, and the platen on which the image receiving layer transfer section is positioned comprises a heat medium for heating the platen

- Species 15 directed to an image recording method using an intermediate support, an image receiving layer transferer, an image receiving layer transfer head, at least one ink-jet head, an image receiver, and an image transfer heat medium for transferring the image receiving layer on which the image is recorded from the intermediate support to the image receiver, wherein the image receiving layer transferer which includes the image receiving layer comprises a laminate in which the image receiving layer comprises a laminate in which the image receiving layer and an aqueous solvent permeating layer are laminated on and in the above listed order from a substrate for the image receiving layer transferer, and the image recording method comprises an image receiving layer transfer step, an image recording step, and an image transfer step
- Species 16 directed to an image recording method using an intermediate support, an image receiving layer transferer, an image receiving layer transfer head, at least one ink-jet head, an image receiver, and an image transfer heat medium, wherein the image recording method comprises an image receiving layer transfer step, an image recording step, and an image transfer step, and the image

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recording section comprises an image drying mechanism which accelerates drying of the recorded image on the image receiving layer

The species are independent or distinct because they represent mutually exclusive species.

Within Group II, there is the following species requirement:

This application contains claims directed to the following patentably distinct species:

- Species A directed to an image forming medium comprising a laminate wherein an aqueous solvent permeating layer and an image receiving layer are laminated on a substrate for the image forming medium in the above listed order from the substrate
- Species B directed an image receiving layer transferer which includes an image receiving layer comprises a laminate wherein the image receiving layer and an aqueous solvent permeating layer are laminated on a substrate for the image receiving layer transferer in the above listed order from the substrate

The species are independent or distinct because they represent mutually exclusive species.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable

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thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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STEPHEN MEIER
SUPERVISORY PATENT EXAMINER